

REMARKS

This Amendment is being filed with a request for continued examination (RCE) filing and is responsive to the Final Office Action dated October 14, 2005, and the Advisory Action mailed January 17, 2006. In this Amendment, Applicants have amended claims 1, 3, 9, 10, 12, 18, 20, 26, 32, 38, 44, 45, 46, 47, 48 and 50; and canceled claims 34 and 40. Claims 1-33 and 35-39 and 40-50 are now pending.

The current amendments have been made solely for the purpose of advancing the prosecution of this application. Applicants maintain traversal of all pending rejections for the reasons formerly advanced on the record. Accordingly, Applicants reserve the right to appeal the former claims, as set forth prior to this Amendment, via one or more continuation applications.

In the Final Office Action, the Examiner rejected claims 1-50 under 35 U.S.C. 103(a) as being unpatentable over Vyncke et al. (USPN 5,926,185) in view of Adobe Illustrator 8.0. Applicants have previously argued that Vyncke et al. (Vyncke) and Adobe Illustrator 8.0 (Illustrator), either singularly or in combination, fail to disclose or suggest the invention defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention. At this time, however, Applicants have further amended all pending claims to make the distinctions from Vyncke and Illustrator even more apparent for the Examiner. Accordingly, Applicant requests reconsideration of the amended claims in view of the following comments.

Claims 1, 10 and 18

Independent claims 1, 10 and 18 recite similar features to one another in the context of different statutory classes of subject matter. Claim 1 is currently amended and recites a method for modification of color values in a page description file. As amended, the method of claim 1 comprises identifying at least some implicit color commands within the page description file; converting the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file, and modifying color values specified by the explicit color commands. Claims 10 and 18 recite similar features to claim 1, but are directed to a computer-implemented system and a computer-readable medium, respectively.

Claims 1, 10 and 18 stand rejected as being obvious over Vyncke in view of Illustrator. However, neither of these references either alone or in combination discloses or suggests the features of Applicants' claims. Indeed, the Vyncke reference actually teaches away from the claimed features of Applicants' invention. Illustrator is nothing more than a user guide for manually changing commands of a page description file when printing difficulties occur in such files. Nothing in Illustrator or Vyncke suggests the modification of color values of explicit color commands that were converted from implicit color commands.

As previously discussed on the record in detail, the Vyncke reference describes methods for processing a set of page description language commands to reduce complexity. However, with respect to implicit and explicit commands, Vyncke teaches the exact opposite of the features required by Applicants' claims. Vyncke teaches the conversion of explicit color objects to implicit color objects, and not conversion of implicit color commands to explicit color commands.

More specifically, Vyncke describes the analysis of a color palette associated with a page description language (PDL) file for possible relationships between the colors. The Vyncke process identifies a color tint (i.e., a percentage amount of a base color) represented as a distinct color in the color palette and converts this explicitly defined color tint to an implicitly defined color tint as a function of the base color. The explicitly defined color tint may then be removed from the color palette and both the tint and the base color may be achieved based on implicit color commands.

Vyncke also describes the identification of intermediate colors of a blend defined as individual colors in a color palette and the definition of each of the intermediate colors as a combination of the two extreme colors of the blend. In other words, Vyncke identifies explicitly defined colors of a blend within a color palette and converts the explicitly defined colors to implicitly defined colors based on boundary colors of the blend. Clearly, the teachings of Vyncke are completely contrary to Applicants' claimed invention. Indeed, the teachings of Vyncke with respect to conversion from explicit to implicit objects appear to be the antithesis of Applicant's claims. Unlike Vyncke, Applicants claims require the conversion of implicit color commands to explicit color commands in order to allow modification of color values of the explicit commands since color conversion with respect to implicit commands can result in inaccurate color modification.

In the previous Office Actions, the Examiner has recognized that Vyncke fails to suggest the conversion of implicit commands to explicit commands, but cited Illustrator as

disclosing this feature. The Examiner maintained that a person of ordinary skill in the art would have been motivated to modify the PDL file simplification process of Vyncke with the manual color object conversion process of Illustrator to arrive at Applicants' claimed invention.

Applicants remain confused as to why the Examiner thinks a person of ordinary skill in the art would have been motivated to use the manual color object conversion process of Illustrator with the PDL file simplification process of Vyncke. Nothing in Vyncke suggests that following its PDL file simplification process would result in any printing problems (addressed by Illustrator). Therefore, since Illustrator describes techniques to apply when printing problems are present and Vyncke lacks anything that would point to such problems, it is unclear why a person of ordinary skill in the art would ever consider a modification of Vyncke in view of Illustrator.

Moreover, insofar as Vyncke teaches the conversion of explicit objects to implicit objects, the Examiner's proposed combination of Vyncke and Illustrator would appear to be inapposite. On one hand, the process of Vyncke converts explicit objects to implicit objects, and on the other hand, the Examiner is arguing that a skilled person would have been motivated to essentially undo this process of Vyncke via the teaching of Illustrator. There appears to be no reason, whatsoever, for a person of ordinary skill in the art to perform the contradictory processes of Vyncke and Illustrator in any combination.

If the Examiner's position is that a person of ordinary skill in the art would have substituted the conversion of implicit objects to explicit objects (per Illustrator) for the conversion of explicit objects to implicit objects in Vyncke, this would completely negate the teaching of Vyncke. In other words, Vyncke specifically teaches conversion from explicit objects to implicit objects in order to reduce complexity, and therefore, if a person substituted the conversion of Illustrator for that of Vyncke, such a substitution would appear to increase the complexity according to the teaching of Vyncke. A person of ordinary skill in the art clearly would not have been motivated to make such a substitution.

In the Advisory Action, the Examiner argued that Applicants' previous observations regarding Vyncke are flawed insofar as Applicants are relying upon specific embodiments of Vyncke in support of Applicants' assertions. Applicants note, however, that Applicants' discussion of Vyncke relates specifically to the passages that the Examiner has relied upon. Applicants are not attempting to rely on any mischaracterization of Vyncke, but are simply reading the reference on its face, and focusing specifically on the passages that the Examiner

is relying upon in his analysis. In short, Applicants believe that Vyncke is directly at odds with the features of Applicants' claims, and the passages cited by the Examiner exemplify such differences.

Notwithstanding Applicants' disagreement with the Examiner's rationale, however, Applicants have amended claims 1, 10 and 18 to even more clearly distinguish the teaching of Vyncke and Illustrator. These claims now require not only the conversion of implicit color commands to explicit color commands, but further require modification of color values specified by the explicit color commands.

Unlike either Vyncke or Illustrator, the features currently recited in claims 1, 10 and 18 perform modification of color values specified by the explicit color commands that are converted from implicit commands. In other words, according to the claimed invention, the implicit color commands are converted to explicit color commands and then modified. This may improve color fidelity by the output device relative to conventional color value modifications that would otherwise occur with respect to the implicit commands.

To the extent that Illustrator may disclose the conversion of implicit commands to explicit commands, the process of Illustrator is manually performed when a user is having difficulty with the printing. Nothing in Illustrator concerns the modification of color values, much less the conversion of implicit color commands to explicit color commands in order to improve color value modification in a page description file. Accordingly, without access to Applicants' disclosure, a person of ordinary skill in the art would have found no reason to perform an implicit to explicit color command conversion prior to color modification.

Claims 3, 12 and 20 formerly recited the modification of color values of the explicit color commands, that were converted from implicit commands. In the former rejections of these claims, the Examiner noted that Vyncke teaches modification of colors of the implicit commands. Applicants note, however, that this is also the antithesis of the claimed invention insofar as Applicants' claims require a conversion from implicit commands to implicit commands specifically to improve upon color modification. Unlike Vyncke, Applicants' claims modify explicit commands that were converted from implicit commands.

The Examiner also stated in the rejections of former claims 3, 12 and 20 that Illustrator teaches an expand command so that objects can be independently manipulated. However, this statement by the Examiner is not supported by any evidence on the record. Indeed, nothing in Illustrator suggests any manipulation of objects following the use of the

expand command, much less modification of color values, as required by Applicants' claims. Illustrator merely describes the use of the expand command if printing problems occur.

Applicants' claimed invention requires not only the identification and conversion of implicit commands to explicit commands, but also require modification of color values of the explicit commands that were converted from implicit commands. Indeed, Applicants disclosure outlines the importance of this novel feature as providing improved color modification of page description files. Rather than modify color values of the implicit commands, the claimed invention converts the implicit commands to explicit commands, and then modifies the color values of the explicit commands. Neither Vyncke and Illustrator, either alone or in combination, discloses or suggests such features. Furthermore, the Examiner's statement that Illustrator suggests the use of the expand command so that objects can be independently manipulated is clearly unsupported by the teaching of Illustrator. Nothing in Illustrator suggests any manipulation of objects following the use of the expand command, much less modification of color values, as required by Applicants' claims.

In view of the arguments advanced above, and claim amendments, the pending claims clearly define patentable subject matter over Vyncke and Illustrator, either alone or in combination. Accordingly, claims 1, 10 and 18 (and the respective dependent claims) should be in condition for allowance.

With respect to new dependent claims 3, 12 and 20, Applicants respectively note some additional amendments have been made to even further distinguish these claims from Vyncke and Illustrator. In particular, claims 3, 12 and 20 have been amended to require that converting the identified implicit color commands includes applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands. Nothing in Vyncke or Illustrator suggests such features.

Claims 26, 32 and 36

Independent claims 26, 32 and 36 recite similar features to one another in the context of different statutory classes of subject matter. Claim 26 is currently amended and recites a method for modification of color values in a page description file. As amended, the method of claim 26 comprises identifying implicit color commands within the page description file, converting each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit color sub-commands replace the

implicit color commands within the page description file, and modifying color values specified by the implicit color sub-commands, wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area. Claims 32 and 36 recite similar features to claim 26, but are directed to a computer implemented system and a computer readable medium, respectively.

Like claims 1, 10 and 18, claims 26, 32 and 36 have been amended to require modification of color values. Unlike claims 1, 10 and 18, however, claims 26, 32 and 36 conversion of implicit color commands to implicit color sub-commands, rather than explicit commands.

To date, the Examiner seems to have rejected claims 26, 32 and 36 using the same rationale applied in the rejections of claims 1, 10 and 18. Unfortunately, the Examiner's rejections of claims 1, 10 and 18 relative the rejections of claims 26, 32 and 36 contradict one another.

For the rejections of claims 1, 10 and 18, the Examiner is arguing that Illustrator teaches the conversion of implicit color commands to explicit color commands. However, for the rejections of claims 26, 32 and 36, the Examiner is arguing that Illustrator teaches the conversion of implicit color commands to implicit color sub-commands. These two statements by the Examiner are contradictory.

Applicants submit that the "expand" command discussed in Illustrator does not generate implicit sub-commands as required by claims 26, 32 and 36. However, in the alternative, if the objects generated by Illustrator are construed by the Examiner as being implicit sub-commands, then they could not also be reasonably construed as explicit commands. The Examiner cannot attribute the same features of Illustrator to contradictory features of different claims.

Either the rejections of claims 1, 10 and 18 or the rejections of claims 26, 32 and 36 must be withdrawn given this contradiction in the Examiner's rationale. Indeed, Applicants note that several sections of the Final Office Action specifically state that the objects generated by Illustrator are explicit commands. Accordingly, the Examiner's contention that such objects are also implicit commands (in the rejections of claims 26, 32 and 36) cannot be justified.

Applicants note, however, that given the further amendments to claims 26, 32 and 36, this issue should be moot in the current application. For example, neither Vyncke nor

Illustrator discloses or suggests the modification of color values specified by the implicit color sub-commands as now required by claims 26, 32 and 36.

As addressed above, nothing in either Vyncke or Illustrator suggests the conversion of implicit color commands to explicit color commands in order to improve color value modification in a page description file. Similarly, nothing in either Vyncke or Illustrator suggests the conversion of implicit color commands to implicit color sub-commands in order to improve color value modification in a page description file.

Claims 44, 45, 46, 47 and 48

Claim 44 recites a method of modification of color values in a page description file. According to claim 44, the method includes accessing implicit color commands within the page description file, converting the implicit color commands to explicit color commands by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands, and modifying the explicit color values without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file. Claim 45 recites similar features in the context of a computer-implemented system, and claim 46 recites similar features in the context of a computer-readable medium storing program code.

Claim 47 recites a method for modification of color values in a page description file having implicit color commands that specify color values as a function of graphic information and color reference values. According to claim 47 the method comprises identifying the implicit color commands within the page description file, converting the implicit color commands within the page description file to explicit color commands within the page description file that specify explicit color values without raster image processing the page description file such that the explicit color commands replace the implicit color commands within the page description file, wherein converting the implicit color commands includes applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands, and modifying color values specified by the explicit color commands based on a profile that characterizes color output by a device to generate a revised page description file.

Claim 48 also recites a method for modification of color values in a page description file. According to claim 48, the method comprises parsing the page description file to

identify implicit color commands that provide implicit definitions of color values, and for each of the identified implicit color commands, generating an explicit color command that approximates the function and content defined by the identified implicit color command by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands. The method also comprises replacing each of the identified implicit color commands within the page description file with the corresponding explicit command within the page description file.

Claims 44, 45, 46, 47 and 48 should be allowed for at least the reasons advanced above with respect to independent claims 1, 10 and 18 and new dependent claims 3, 12 and 20. Although the claims are not identical, the arguments advanced above with respect to 1, 10 and 18 and new dependent claims 3, 12 and 20 also apply to the various features recited in independent claims 44, 45, 46, 47 and 48. Moreover, additional features have also been added to some of claims 44, 45, 46, 47 and 48, such as a requirement that the modification of color values be based on a profile a profile that characterizes color output by a device, and a requirement that following the modification, a revised page description file is generated. Applicant reserves further comment on these claims at this time.

Claim 50

Claim 50 recites a method for modification of color values in a page description file. The method of claim 50 requires identifying an implicit shading command within the page description file that defines a graphic image object characterized by a starting color value, an ending color value, and a shading function over a range of color values between the starting color value and the ending color value, converting the identified implicit shading command within the page description file to explicit color commands within the page description file without raster image processing the page description file, wherein the explicit color commands for the implicit shading command defines the graphic image object as a plurality of sub-objects, each of the sub-objects being assigned a color value corresponding to a color value produced by the shading function in an area of the graphic image object corresponding to the respective sub-object, and modifying color values specified by the explicit color commands based on a profile that characterizes color output by a device to generate a revised page description file.

In the current rejection of claim 50, the Examiner may have overlooked the requirement of this claim that requires modification of the color values specified by the explicit color commands, which were converted from the implicit shading command. Applicants note that this claim has been further clarified that such modification of the color values specified by the explicit color commands is based on a profile of an output device, and that such modification results in the generation of a revised page description file. Nothing in Vyncke or Illustrator suggests such features.

Conclusion

In conclusion, the Vyncke reference appears to be wholly irrelevant to the current pending claims insofar as Vyncke teaches operations that are exactly opposite to the conversion from implicit color commands to explicit color commands, as set forth in many of Applicants' claims. Furthermore, Examiner's argument that a person of ordinary skill in the art would have been motivated to modify the process of Vyncke to include a conversion from implicit objects to explicit objects, as shown in Illustrator, is incorrect. A conversion from implicit objects to explicit objects, as shown in Illustrator, contradicts a conversion from explicit objects to implicit objects, as taught by Vyncke.

With respect to claims 26, 32 and 36, the Examiner's interpretation of Illustrator as disclosing the conversion of implicit color commands to implicit color sub-commands contradicts the Examiner's other interpretations of Illustrator with respect to claims 1, 10 and 18. On one hand, the Examiner is interpreting the generated objects in Illustrator to be explicit objects and, on the other hand, the Examiner is interpreting the generated objects in Illustrator to be implicit objects. Nevertheless, the claim amendments set forth herein even further distinguish all pending claims from the applied references insofar as all claims now require color modification based on a profile of an output device to generate a revised page description file.

To the extent that the Illustrator reference may disclose the expand command for use when printing errors occur, the prior art clearly lacks any teaching that would have suggested the conversion of implicit objects to implicit objects for the purpose of facilitating improvements in color modification of the page description file. Applicants' pending claims articulate these novel and non-obvious aspects of the invention by requiring modification of color values specified by the explicit color commands. Neither Vyncke nor Illustrator suggests the modification of color values of explicit commands that were converted from implicit

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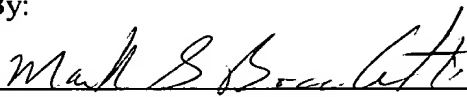
commands. Indeed, nothing in Illustrator suggests any manipulation of objects following the use of the expand command, much less modification of color values, as required by Applicants' claims. Illustrator merely describes the use of the expand command if printing problems occur.

Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 05-0225. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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